



# Moose Creek Incident Decision

Published  
06/10/21 18:38

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# 1. Decision

## 1.1. Decision Summary

### Decision Information

NAME	VALUE
Published	06/10/2021 18:38 CDT
Estimated Cost	\$100,000
Incident Owner(s)	Willie Branson
Editor(s)	Richard Davis, Peter Butteri, Tim Hammond
Reviewer(s)	Christopher Wennogle
Approver(s)	Richard Davis, Tim Hammond
Natl Preparedness Level	2

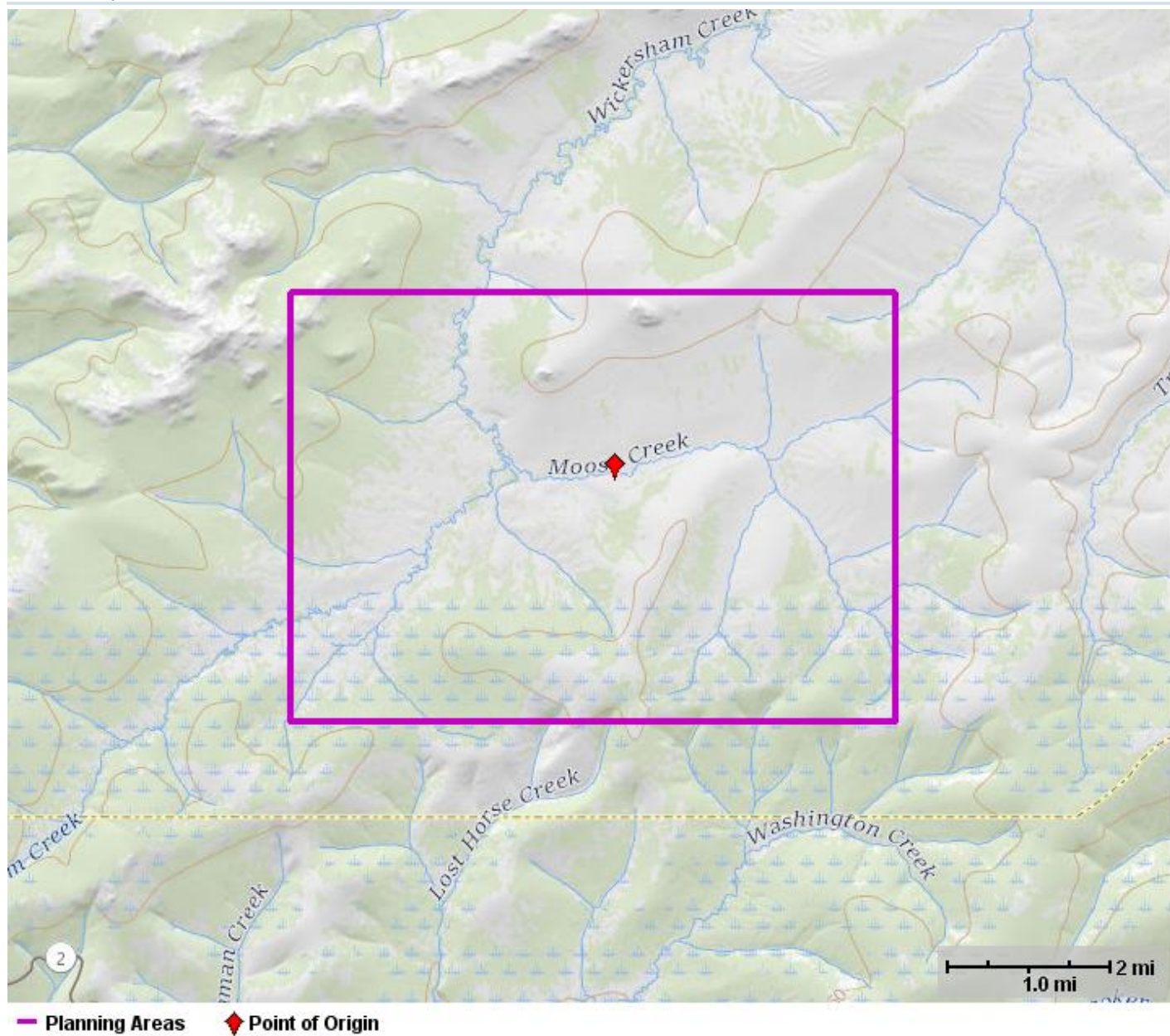
### Decision History

Editor Name	Action	Date (CDT)	Comment
Hammond, Tim	Published	06/10/2021 18:38	
Hammond, Tim	Approved	06/10/2021 18:38	
Davis, Richard	Approved	06/10/2021 17:59	
Branson, Willie	Review Requested	06/10/2021 17:33	
Branson, Willie	Review Requested	06/10/2021 17:33	The maps are updated and made the edits that were suggested and fire 166 will follow shortly.
Branson, Willie	Created	06/08/2021 15:56	

## 1.2. Incident Information

### Incident Information

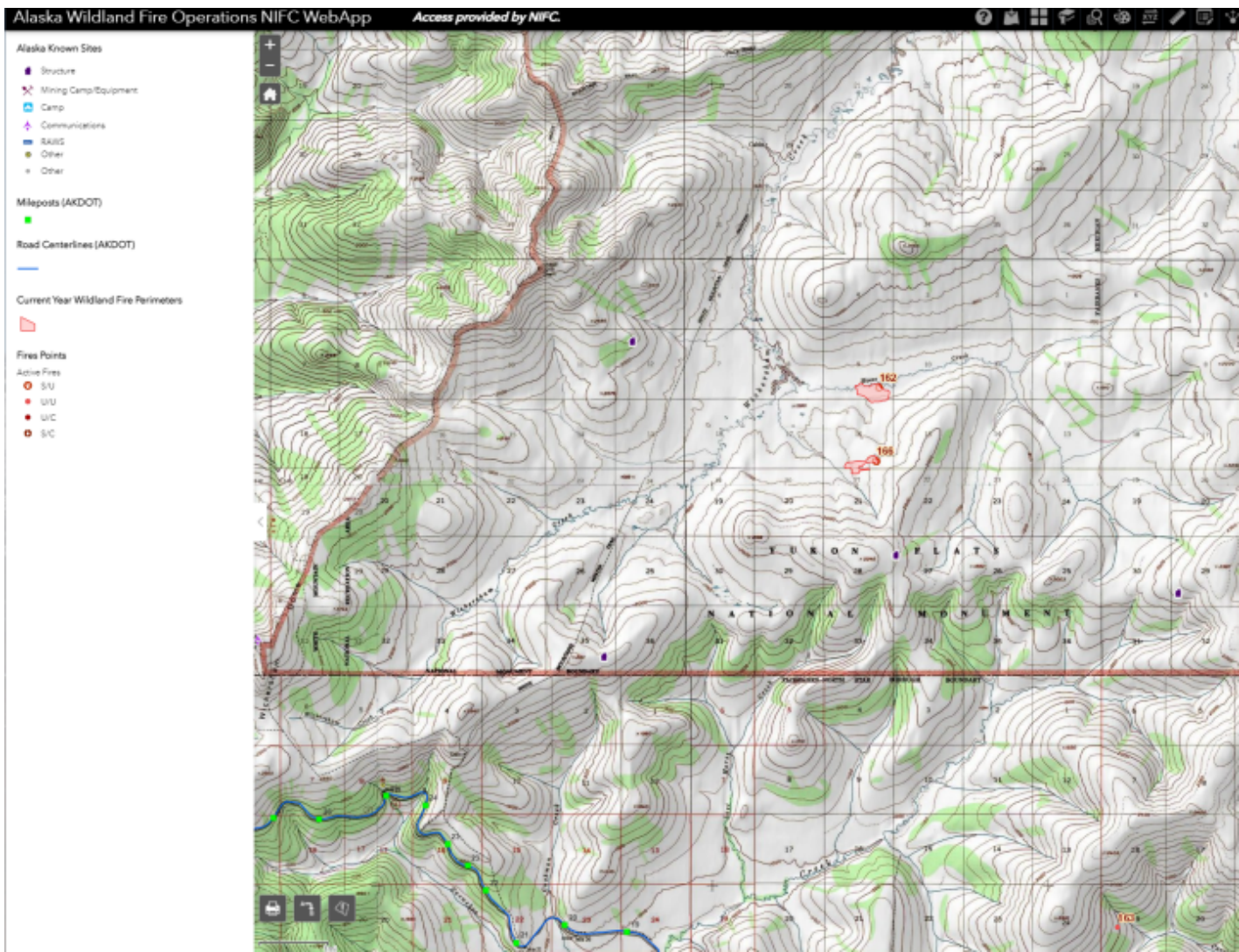
NAME	VALUE
Incident Name	Moose Creek
Unique Fire Identifier	2021-AKUYD-000162
Responsible Unit Name	Alaska Fire Service - Upper Yukon Zone
FireCode	N2FP
P-Code	
Point of Origin	65.26945N / 147.75335 W
Incident Size	57.3acres
Latest WFDSS Perimeter Size	0acres
Incident Cause	Natural
Incident Type	Wildfire
Incident Discovery	06/07/2021 19:44
Contained	
Controlled	
Out	
Jurisdictional Unit	AKEID - Eastern Interior Field Office
Jurisdictional Agency(s)	BLM
Geographic Area (prep level)	Alaska (1)
Owner Name(s)	Willie Branson



Incident Overview Map

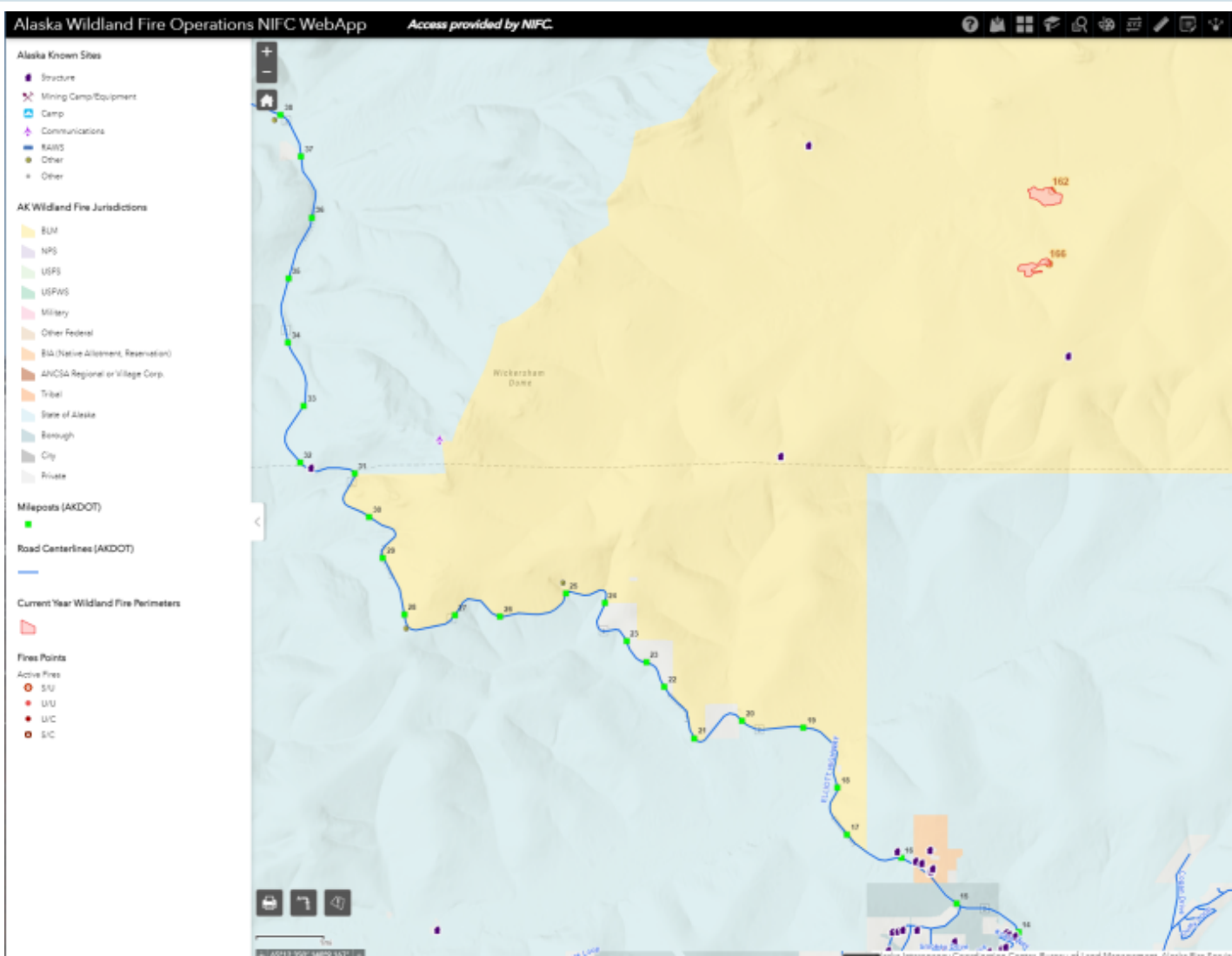
[Overview Map](#)

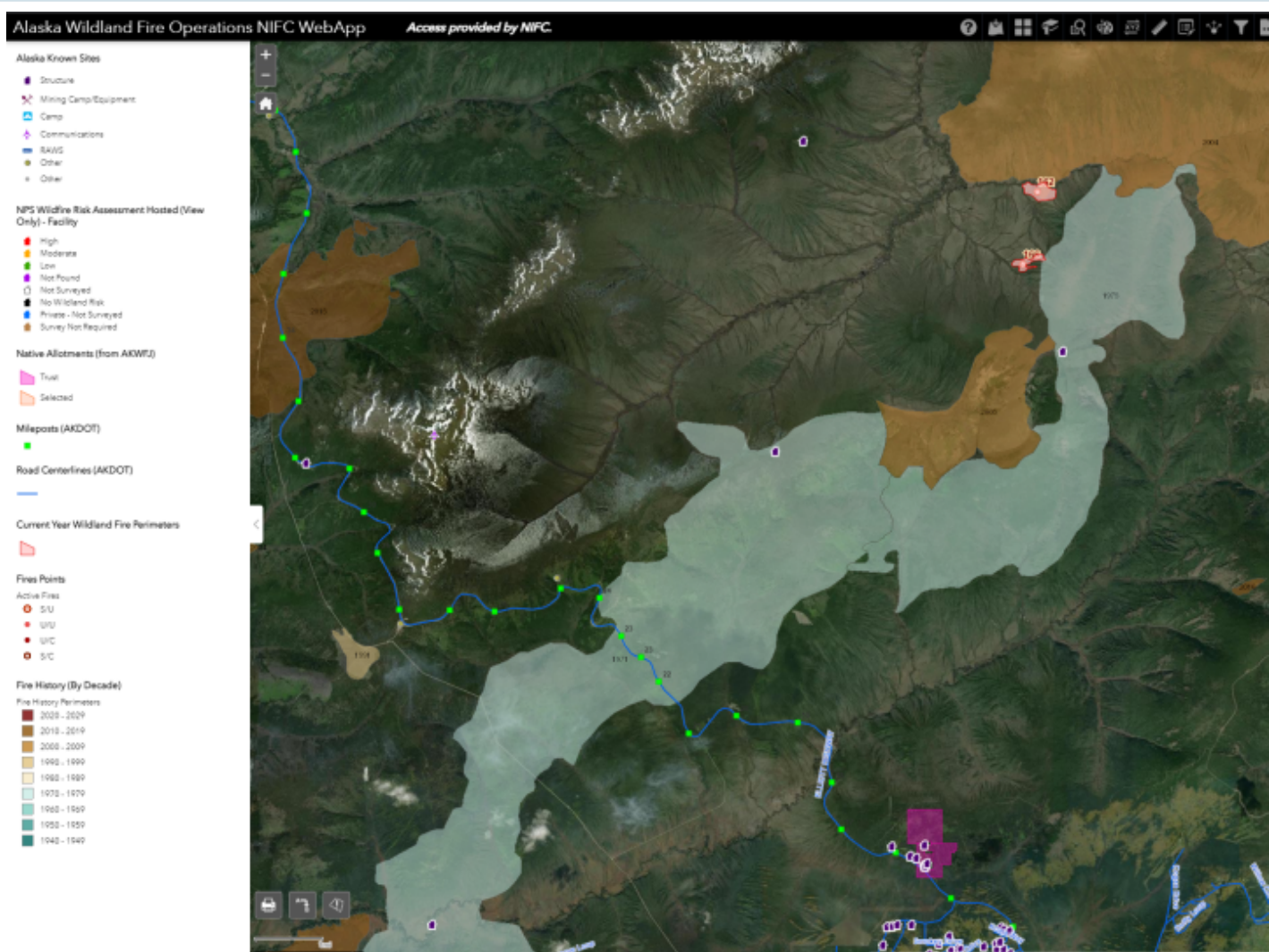




Jurisdictions Map

[JurisdictionsMap](#)





## 1.3. Weather

### Fire Weather Zone Forecast

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000  
FNAK53 PAFG 101428 CCA  
FWFAFG  
Fire Weather Planning Forecast for Interior Alaska...CORRECTED  
National Weather Service Fairbanks AK  
628 AM AKDT Thu Jun 10 2021  
.DISCUSSION...  
A cold front will move eastward over the Interior today before dissipating tonight. This will bring slightly cooler temperatures and more moist conditions as far east Fairbanks for today. Dry conditions will persist today in the upper Tanana Valley with minimum RH values less than 25 percent. Thunderstorms today will be confined mainly to areas right along the Canadian Border. The area with the potential for afternoon and evening thunderstorms will expand on Friday to cover the Upper Tanana Valley and the Fortymile Country, with isolated thunderstorms from Fairbanks east on Saturday. A warming trend in temperatures is expected for Friday and Saturday, with significant warming possible early next week. Gusty southerly winds in the eastern Alaska Range will decrease this morning.  
AKZ222-110730-  
Middle Tanana Valley-  
Including the cities of Fairbanks, Fort Wainwright, Eielson AFB, Ester, North Pole, Moose Creek, Two Rivers, Fox, Chatanika, Chena Hot Springs, and Sourdough Camp  
628 AM AKDT Thu Jun 10 2021

	Today	Tonight	Fri
Cloud cover	Mcldy	Mcldy	Pcldy
Precip type	Showers	Showers	Showers
Chance precip (%)	40	20	20
Temp (24h trend)	58-68 (0)	43-50 (0)	61-71
RH % (24h trend)	27-42 (+1)	67-82 (-6)	30-45
20ftWnd(mph)	Lgt/Var	Lgt/Var	Lgt/Var
CWR	5	0	0
LAL	1	1	1

Remarks...None.  
.FORECAST FOR DAYS 3 THROUGH 5...  
.SATURDAY...Mostly cloudy. Chance of showers and isolated thunderstorms. Lows 44 to 51. Highs 65 to 75. Northeast winds around 5 mph.  
.SUNDAY...Mostly cloudy. A 20 percent chance of showers and thunderstorms. Lows 46 to 52. Highs 66 to 76. West winds around 5 mph.  
.MONDAY...Mostly cloudy. A 20 percent chance of showers. Lows 47 to 53. Highs 68 to 78. Light winds.  
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## 1.4. Risk

### Relative Risk

NAME	VALUE
Relative Risk	Moderate
Duration	High
Saved By	Branson, Willie
Completed	06/10/2021 12:58 CDT

### Relative Risk Notes

Even though the fire behavior is benign at the moment and there are few values threatened, with no suppression action there is high potential for fire growth into Washington Creek drainage which would threaten State lands and additional values at risk.

### Values Notes

The fire is in a relatively remote area 10 mile East of the Elliott Hwy on BLM lands in the White Mountains National Recreation Area, within the Limited Fire Management option. The nearest sites are an Air Force sensor 2.5 miles to the Southwest and BLM recreation cabins, Eleazar's Cabin 3 miles to the West Northwest and Moose Creek Cabin 5 miles to the South East.

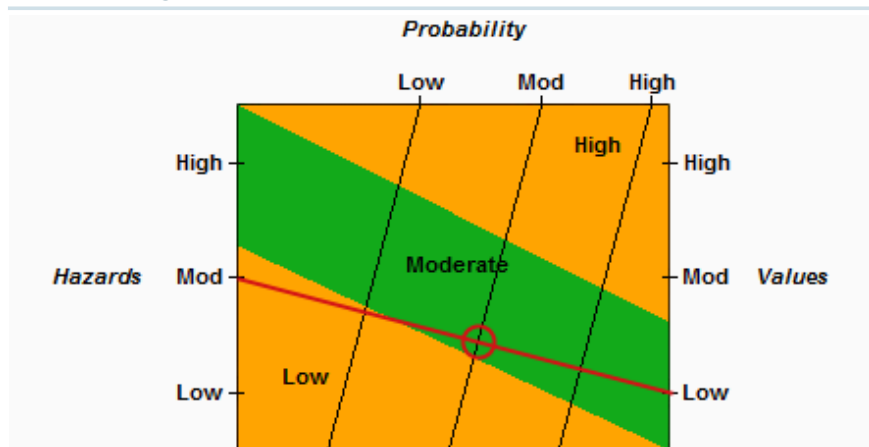
### Hazards Notes

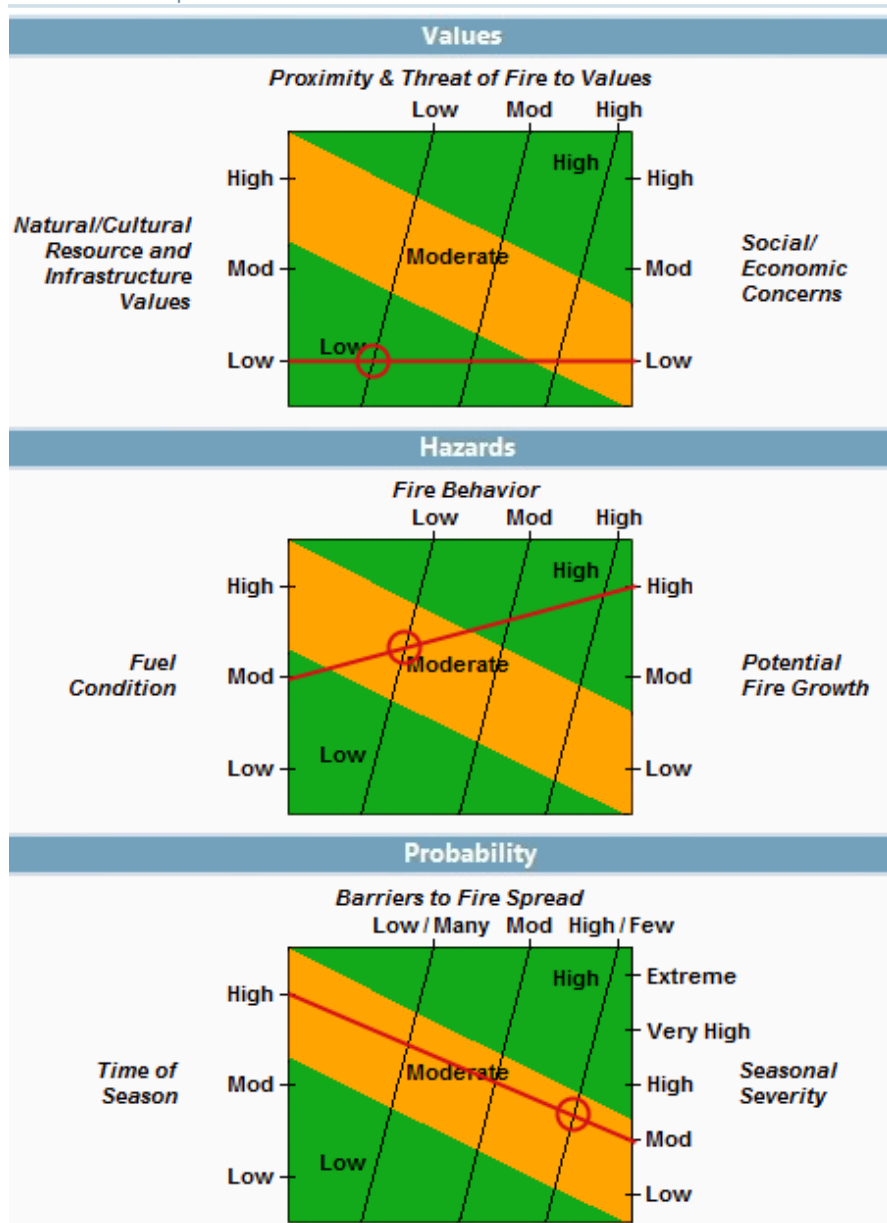
Currently fuel conditions are relatively moderate and fire behavior is low. If no suppression action is taken there is potential for large fire growth later in the fire season.

### Probability Notes

It is early in the fire season and the fire is burning in continuous fuels with no recent fire history. There is a significant probability the fire could growth to the South and East into the Washington Creek drainage.

### Relative Risk Chart





## Organization Assessment

NAME	VALUE
Unit Recommended Org Type 4	
Saved By	Branson, Willie
Completed	06/10/2021 17:29 CDT

## Organization Assessment Notes

Because current and anticipated fire behavior is minimal and fire is small, the current organization with an additional crew can quickly contain and control the fire.

## Relative Risk Notes

Even though the fire behavior is benign at the moment and there are few values threatened, with no suppression action there is high potential for fire growth into Washington Creek drainage which would threaten State lands and additional values at risk.

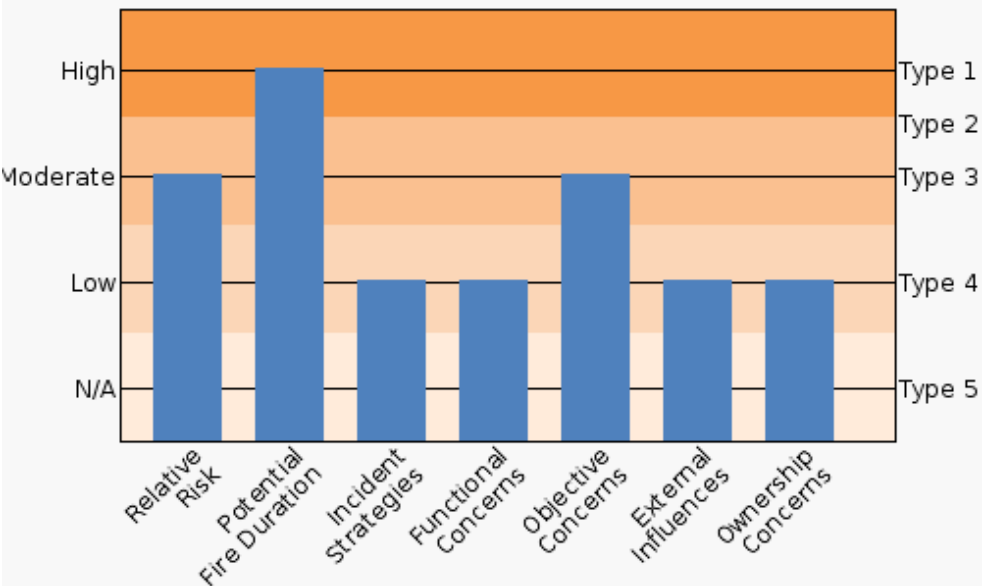
## Implementation Difficulty Notes

Because this is an early season fire if left un-suppressed there is a high probability it will be a long duration fire. The current course of action has a high probability of success due to resource availability and favorable weather patterns. Functional concerns are low due to accessibility and favorable fire weather conditions.

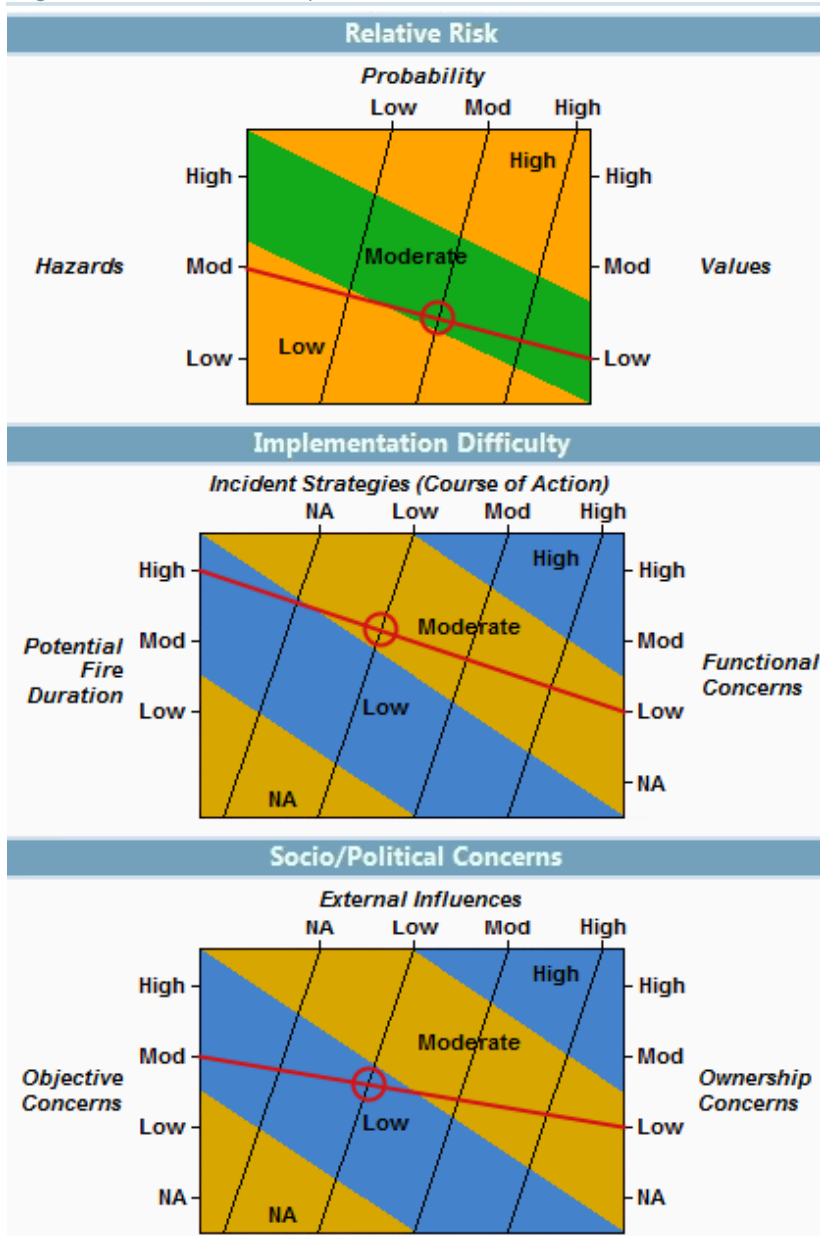
Socio/Political Concerns Notes

Currently the fire is not visible from the Hwy. The fire and planning area is all on BLM lands but if allowed to grow is expected to impact State of Alaska lands. The current objectives of full suppression have a high probability of success.

Organization Assessment Chart



Unit Recommended Org:Type 4



Planning Area Values Inventory Generated at 06/08/2021 15:21

NAME	VALUE
Planning Area Name	06/10/2021 18:38
Incident Name	Moose Creek
Planning Area Size	24,932 acres

Category	Value	Data Source	Currency	Coverage
BLM Buildings	4	BLM	10/05/2020	National
Building Clusters: Yukon-Koyukuk, AK	no data	Various	Various	Available counties
County: Yukon-Koyukuk, AK	24,932 acres	US Census Bureau - TIGER	02/02/2021	National
Landowner Category: BLM	24,932 acres	PAD-US 2.0, AICC, BIA/WFDSS, Census	10/09/2020	National
Protecting Unit: BLM	24,932 acres	Various	01/01/2020	AK, CA, ID, MT, NM, MN

#### Coverage of Values Queried that Produced No Results

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BLM Horse and Burro (National), BLM Oil / Gas Leases (National), BLM Range Allotments (National), Campgrounds (National (BLM and USFS only)), Class 1 Airsheds (National), Communication Towers (National), Electric Power Plants (CONUS, AK, HI, Puerto Rico, Guam, N. Marian Islands, and US Virgin Islands), Electric Sub Stations (CONUS, AK, HI, Puerto Rico, Guam, N. Marian Islands, and US Virgin Islands), Electric Transmission Lines (CONUS, AK, HI, Puerto Rico, Guam, N. Marian Islands, and US Virgin Islands), Est Ground Evac Time (CONUS), Estimated Population (CONUS, AK, HI, PR), Habitat (National), IRA (National), Mines (National), NPS Buildings (National), NRA (National), Natl Historic Trails (National), Natl Recreation Trails (National), Natl Scenic Byways (National), Natl Scenic Trails (National), Natl Wild Scenic Rivers (National), Oil and Gas Pipelines (National), Other Areas (National), Ozone Non-Attainment (National), Particulates Non-Attainment (National), Roads (National), Sage Grouse Habitat (National), TNC Lands (National), USFS Buildings (National), USFS Trails (CONUS, AK, HI, PR), USFWS Trails (CONUS, AK, HI, PR), WSA (National), Wilderness (National)



## 1.5. Objectives

### Incident FMU/Strategic Objective Code List

Unit	FMU/Strat Obj Code	Acres
AKEID	AKEID - Eastern Interior Field Office	24,932

### Spatial Fire Planning Inventory

Category	Value	Data Source	Currency	Coverage
AK Fire Mgmt Options: Limited	24,932 acres	Alaska Interagency Fire Center	06/04/2021	Alaska Only
Mgmt Req: White Mountains RMP	24,932 acres	AKEID	Current	Unit Level

### Incident Objective List

Activated	Incident Objective
06/10/2021	Protect Lees, Eleazar's, and Moose Creek public use cabins.
06/10/2021	Protect the Air Force Sensor site to the south.
06/10/2021	Minimize the long-term threat to additional values to the west in the Elliott Highway corridor and to the south on state and private lands.

### Incident Requirement List

Activated	Incident Requirement
06/10/2021	Use standard Alaska Minimum Impact Suppression Tactics to the extent possible.
06/10/2021	Coordinate suppression actions with forces on Fire 166-Zyryanka.
06/10/2021	Notify EIFO of any cultural resources encountered, any potential for erosion damage, and any take of wildlife in defense of life and property.

### Strategic Objective List

Unit	Shape/FMU	Activated	Strategic Objective
	AK Fire Mgmt Options	04/24/2019	<b>"AIWFMP Limited Fire Management Option</b> The default initial action is to conduct surveillance, assessment, and site protection as warranted. Initial action priorities are to: " <ol style="list-style-type: none"><li>1. Protect human life.</li><li>2. Protect qualifying sites and natural resources from damage by wildfire.</li><li>3. Allow fires to burn naturally to the extent possible in order to protect, maintain, and enhance natural and cultural resources and maintain natural fire regimes.</li></ol>

### Management Requirement List

Unit	Shape/FMU	Activated	Management Requirement
	AK Fire Mgmt Options	06/04/2021	<b>Alaska Interagency Wildfire Management Plan Statewide Management Requirements</b>  <b>AIWFMP Statewide Management Requirements</b> <ul style="list-style-type: none"><li>• Weigh the cost and environmental impacts of suppression actions against the value of resources warranting protection. Consider risk to firefighters and the public in all fire management decisions.</li><li>• To the extent possible, minimum impact suppression tactics should be used. Firelines will be constructed in a manner that minimizes erosion and will follow natural contours wherever possible. Indirect attack will be used to the extent practical. A suppression repair plan for wildfire suppression activity damage, as approved by the Jurisdictional Agency(ies), must be completed before the final demobilization occurs.</li></ul>

Unit	Shape/ FMU	Activated	Management Requirement
			<ul style="list-style-type: none"> <li>• Jurisdictional Agencies will be made aware of all support areas such as camps, staging areas, and helispots located on their lands.</li> <li>• If a game animal is killed in defense of life or property (DLP) on an incident, an Alaska Department of Fish &amp; Game (ADF&amp;G) DLP report will be filed and Jurisdictional Agencies will be notified.</li> <li>• Base camps, spike camps, helispots and other support areas should be located in natural clearings if possible. The construction of helispots should be minimized. Any opening created for support areas will be cut with an irregular perimeter. Such areas will be kept clean so as not to attract animals and will be cleaned up before departure of the last suppression personnel.</li> <li>• Support areas on private lands or Native Allotments require a land-use agreement. No resources (e.g. firewood) will be removed from private lands or Native Allotments without an approved agreement. Agreements involving Native Allotments must be prepared by the BIA or the local BIA service provider.</li> <li>• The use of tracked or off-road vehicles requires approval by the Jurisdictional Agency (ies) prior to use.</li> <li>• When withdrawing water from a fish-bearing stream with portable pumps, scooper aircraft, or aerial buckets; or when crossing it with a vehicle or heavy equipment, comply with the stipulations and notification requirements in the ADF&amp;G statewide <i>Fish Habitat Permit FH20-SW-0001 Amendment 1</i>.</li> <li>• Protecting and Jurisdictional Agencies will coordinate with state land managers if wildland fire or wildland fire management activities have the potential to affect public access to public waters or impact state resources. Protecting and Jurisdictional Agencies will coordinate if wildland fire or wildland fire management activities may result in fire area public access closures or may adversely impact values at risk.</li> <li>• Take measures to prevent the introduction and spread of terrestrial and aquatic invasive species during fire operations. Waterbodies known to harbor invasive species will not be used as dip sites unless needed to protect property or life. If used, equipment will be cleaned and sanitized before its next use. Communicate concerns, questions, and needs regarding invasive species to jurisdictional resource advisors in a timely manner.</li> </ul>
AK Fire Mgmt Options		06/04/2021	<p><b>Alaska Interagency Wildfire Management Plan Statewide Management Requirements</b></p> <p><b>AIWFMP Statewide Management Requirements (continued)</b></p> <ul style="list-style-type: none"> <li>• Application of aerial fire retardant near lakes, wetlands, streams, rivers, and sources of human water consumption or areas adjacent to water sources should be avoided. A minimum of 300 feet is identified in the <i>Interagency Standards for Fire and Fire Aviation Operations</i> (Red Book). Individual Jurisdictional Agencies may have more restrictive retardant use guidelines.</li> <li>• Suppression activities including flight patterns on or near cultural sites or sites designated as "Avoid" must be coordinated with the Jurisdictional Agency.</li> <li>• Jurisdictional Agencies should be consulted concerning any operational restrictions in designated wilderness areas.</li> <li>• Jurisdictional Agencies will communicate planned fuels treatment locations to incident management organizations for consideration when locating firelines.</li> <li>• Wildland firefighters will not take direct suppression action on structure, vehicle, dumpster, trash, or landfill fires. Structure, vehicle, and landfill fire suppression is not a functional responsibility of wildland fire resources. These fires have the potential to emit high levels of toxic gases. Wildland firefighters who encounter structure, vehicle, or landfill fires will not engage in direct suppression action. Structure protection (not suppression) activities will be limited to exterior efforts, and only when such actions can be accomplished safely and in accordance with agency policy and established wildland fire operations standards.</li> <li>• Any discovery by firefighters of potential unexploded ordnance (UXO) or other potentially hazardous materials (e.g., mining sites) will be immediately reported through proper channels. Firefighters will remain clear of the area until the threat has been evaluated and mitigated.</li> </ul>
AKEID	White Mountains RMP	07/01/2017	<p>White Mountains Record of Decision and Approved Resource Management Plan (2016):</p> <p>*Goals Related to Wildland Fire Incidents-</p> <p>-Protection of human life is the single overriding priority. Other priorities are based on the values to be protected, human health and safety, and the costs of protection.</p> <p>-Respond to all wildfires, with an emphasis on firefighter and public safety, and ensure that costs are commensurate with the values to be protected.</p>

Unit	Shape/ FMU	Activated	Management Requirement
			<ul style="list-style-type: none"> <li>-Use wildland fire, and other treatments to maintain or restore ecological systems and to meet land use and resource management objectives.</li> <li>-Prevent human caused wildfires.</li> <li>-Reduce risk and costs of wildfire by managing wild fires to meet resource objectives and implementation of fuels management projects.</li> <li>-Reduce adverse effects of wildland fire management activities.</li> <li>-Identify, preserve and protect significant cultural resources by a variety of means; including site avoidance or conservation, site stabilization, monitoring, public awareness programs, and/or data recovery to ensure that these resources are available for appropriate uses by present and future generations</li> </ul>
AKEID	White Mountains RMP	07/01/2017	<p>White Mountains Record of Decision and Approved Resource Management Plan (2016):</p> <p>*Decisions Relating to Wildland Fire Incidents:</p> <ul style="list-style-type: none"> <li>-Implement interagency wildland fire smoke effects mitigation measures adopted by the Alaska Wildland Fire Coordinating Group. Consider smoke effects on human health, communities, recreation, and tourism in all wildland and prescribed fire management activities.</li> <li>-Manage wildland fire to achieve natural fire regimes and ecosystem processes dependent upon fire. Use prescribed fire in select areas to improve wildlife habitat.</li> <li>-In response to shifting fire regimes resulting from climate change, fire management may be implemented to achieve wildlife habitat objectives (e.g., meeting habitat needs for subsistence species) or to facilitate ecosystem adaptation to climate change (e.g., addressing spread of invasive plants).</li> <li>-All firelines will be rehabilitated and closed to OHV use to facilitate revegetation. Rehabilitate firelines by spreading original soil and vegetation on the disturbed ground, except in specific circumstances where seeding or planting may be necessary. Protect vegetation from damage caused by summer OHV use. In specific circumstances where firelines are routed and constructed so that they meet pre-determined travel management needs and maintain resource values, the AO may determine that an exception is appropriate and retain suitable firelines as OHV or snowmobile routes. Fire lines built on existing roads or OHV trails will be returned to conditions suitable for original use.</li> <li>-Manage lichen-rich plant communities as high value habitats due to the slow growth potential of lichen and its great importance to caribou.</li> <li>-Minimize impacts to known nesting sites of priority raptors from actions authorized by the BLM. Priority raptor species are peregrine falcon, gyrfalcon, bald eagle and golden eagle. Specific SOPs applicable to priority raptor habitats are listed in Appendix A Standard Operating Procedures and Fluid Mineral Leasing Stipulations. All priority raptor SOPs may be modified based on project-specific analyses. Nest sites of other raptors would be similarly managed, although management would generally be less restrictive and would be determined in site-specific environmental analyses.</li> </ul>
AKEID	White Mountains RMP	07/18/2017	<p>White Mountains Record of Decision and Approved Resource Management Plan (2016):</p> <p>*Standard Operating Procedures-</p> <p><i>These Standard Operating Procedures are implementation level actions. They may be modified through site-specific analysis of subsequent authorizations, but still must meet the goals and objectives of the Approved RMP. Standard Operating Procedures will continue to evolve as better resource information is gained and/or changes in technology become available. Modifications to Standard Operating Procedures may be appropriate if other measures are taken to protect resources that would result in the same or reduced impact.</i> The following SOPs relate to Wildland Fire Incidents:</p> <ul style="list-style-type: none"> <li>-Where practicable and feasible, avoid disturbance of the vegetative mat and permafrost soil areas.</li> <li>-Fire management actions, including prescribed fire operations, wildland fire suppression and fire rehabilitation efforts, will protect burned and adjacent areas from the introduction and spread of non-native invasive plants. Protection may include the use of washing stations with a containment system.</li> <li>-The BLM will not be held responsible for protection of permittees' structures or their personal property from wildland fire. It is the responsibility of permittees and lessees to mitigate and minimize risk to their personal property and structures from wildland fire, following the conditions in their permit.</li> <li>-Gas-powered equipment must be equipped with manufacturer approved and functional spark arrestors.</li> <li>-To avoid the potential impacts to aquatic life, the application of fire chemicals including retardant will be avoided within 300 feet of waterbodies. Deviations are acceptable when life or property is threatened and fire chemicals reasonably expected to alleviate the threat. The AO may approve a deviation if potential damage to natural resources outweighs the impact to aquatic resources.</li> <li>-To the extent practicable, select the location for incident bases, camps, helibases, and so on to avoid riparian areas.</li> </ul>

## Management Requirement List

Unit	Shape/ FMU	Activated	Management Requirement
			-Authorized human activity within 500 meters of priority raptor nest sites will be minimized during the nesting season. The cumulative number of authorized visits (defined as each day in which work is done within 500 meters of a nest site) to any nest site per nesting season, by all authorized users, must be limited to three visits per nest site.

## 1.6. Course of Action

### Course of Action

Active	Inactive	Action Item
06/10/2021		Contain the fire using direct tactics to the extent possible.
06/10/2021		Prevent spread into the Washington Creek Drainage where terrain and continuous fuels may allow spread towards the Elliott Highway and Haystack Subdivision.
06/10/2021		Use aerial support judiciously to increase effectiveness and/or reduce risk.
06/10/2021		Implement site protection if fire spread toward identified values warrant.



## 1.7. Cost

Estimated Final Cost

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NAME	VALUE
Estimated Final Cost	\$100,000
Method(s) Used	Spreadsheet

### Comments

The Upper Yukon Zone FMO provide the estimated cost of Smoke Jumpers, a crew, helicopter flights, UAS and support staff in order to put the fire out.

## 1.8. Rationale

Fire 162 Moose Creek and nearby fire 166-Zyryankawere ignited by lightning on the evening of June 7th and 8th respectively, within the Limited Fire Management Option. Both fires are burning on the White Mountains National Recreation Area managed by the BLM Eastern Interior Field Office. Currently no other jurisdictions are threatened and the collaborators involved in this decision process are the BLM Eastern Interior Field Office as the Jurisdiction and the Alaska Fire Service, Upper Yukon Zone as the Protecting Unit.

Currently Fire 162 is estimated at 61 acres and Fire 166 at 33 acres. They are smoldering and creeping in tundra and spruce, primarily in the upper layers of surface fuels. Resistance to control is low and the forecast is for relatively damp conditions for the next several days.

The nearest values to the fire that may require protection are BLM's Lees, Eleazar's, and Moose Creek public use cabins and an Air Force Sensor site to the south. Additional values of concern that could be threatened if the fire is allowed to spread include the Elliott Highway corridor to the west and the Haystack Subdivision to the south. Threats to these higher value and more distant concerns can be reduced by preventing spread into the Washington Creek drainage.

Although the default response for ignitions in the Limited Fire Management Option is to monitor spread and provide site protection as needed, we have decided to take non-standard responses and chose to commit a load of smokejumpers and a type 2 crew to suppress these two fires while they are small and fire behavior allows for direct attack so that a long-term commitment of resources will not be required to protect values later in the season. Although there could be potential fuels reduction and resource benefits gained by allowing fire spread and providing point protection as needed, we feel that any benefits are outweighed by the risks and cost associated with a potential long-term resource commitment later on. This decision aligns with the White Mountains RMP goal to respond to all wildfires, with an emphasis on firefighter and public safety, and ensure that costs are commensurate with the values to be protected.

Currently, the primary source of risk is the remote location of the fire and the need for aerial extraction in the event of an injury; however this short-term risk to a small type 4 organization is outweighed by the potential for exposing more resources over a longer duration in more severe conditions if spread later in the season requires action.

Due to the small size of the fires and the mild fire behavior there is a high probability that they can be contained with a minimal commitment of resources and cost. The Zone estimates 8 smokejumpers and a type 2 crew can contain, control, and mop-up both fires in 10 days or less with a final cost of \$100,000.

If resource commitment exceeds two weeks or if the fire spreads into the Washington Creek drainage or threatens to impact Elliott Highway traffic this decision will be reassessed and we will determine whether a new decision is warranted.

EIFO will conduct a review to determine whether a management option change is warranted and whether fuels reduction treatments may allow for managing future fires for resource benefit.